

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 03-151862

(43)Date of publication of application : 28.06.1991

(51)Int.Cl.

A23L 3/12

(21)Application number : 01-288799

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(22)Date of filing : 08.11.1989

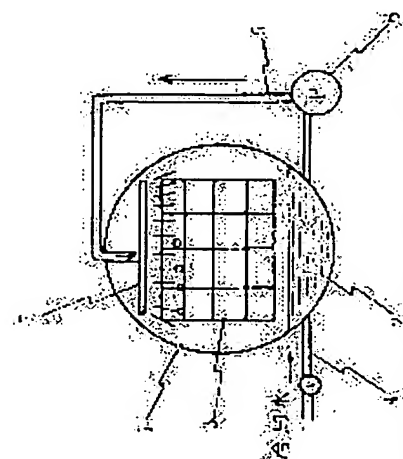
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## (54) COOLING METHOD IN RETORT STERILIZATION

(57)Abstract:

**PURPOSE:** To improve the uniformity of the temperature of food in cooling by charging cooling water at the bottom part of a retort pot in a steam retort sterilization, heating the cooling water with steam during the sterilization process and spraying the hot water to the sterilizing object while slowly cooling the water with chilled water.

**CONSTITUTION:** A sterilizing object 3 is placed in a retort pot 1 and sterilized by heating with steam 4. The sterilizing object is cooled by the following method in the above sterilization process. Cooling water 2 is introduced to the bottom part of the retort pot 1 to an extent not to directly contact with the sterilizing object 3 and the introduced water is heated to the sterilization temperature with steam during the sterilization process. In the cooling step, the heated cooling water 2 is sprayed from above in the form of shower (with a shower plate 7) and cooling water is slowly introduced from the outer source 4 to the bottom of the pot to slowly lower the temperature of the cooling water circulating in the retort 1 (with a pump 6 and a circulation pipe 5). The sterilizing object 3 can be slowly cooled by this process under controlled rate of temperature decrease in the retort 1.



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[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]